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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,349	11/25/2003	Kimihide Takahashi	Q78581	3898
23373 7590 12/31/2007 SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037			EXAMINER	
			LE, TUAN H	
			ART UNIT	PAPER NUMBER
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			12/31/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<del></del>		Application No.	Applicant(s)			
Office Action Summary			Applicant(s)			
		10/720,349	TAKAHASHI, KIMIHIDE			
	Office Action Summary	Examiner	Art Unit			
		Tuan H. Le	2622			
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
WHICH - Extensi after SI - If NO p - Failure Any rep	RTENED STATUTORY PERIOD FOR REPLY HEVER IS LONGER, FROM THE MAILING DATE ions of time may be available under the provisions of 37 CFR 1.13 IX (6) MONTHS from the mailing date of this communication. We reply is specified above, the maximum statutory period we to reply within the set or extended period for reply will, by statute, ply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION  (6(a). In no event, however, may a reply be tim  (ill apply and will expire SIX (6) MONTHS from  cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1)⊠ F	Responsive to communication(s) filed on Amer	ndments filed on 10/17/07				
	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
′—	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Dispositio	n of Claims					
4)⊠ Claim(s) <u>1-5 and 18-20</u> is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ C	Claim(s) <u>1-5 and 18-20</u> is/are rejected.					
7) 🗌 🤇	Claim(s) is/are objected to.					
8) <u> </u>	Claim(s) are subject to restriction and/or	election requirement.				
Applicatio	n Papers		·			
9)□ T	he specification is objected to by the Examine	·.				
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
	Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)[] T	he oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
Priority un	nder 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:						
1.☐ Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
	application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list of the certified copies not received.						
Attanh	a)		-			
Attachment(s	s) of References Cited (PTO-892)	4) Interview Summary	(PTO_413)			
	of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate			
	ation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	5) Notice of Informal P 6) Other:	atent Application			

#### **DETAILED ACTION**

## Response to Arguments

Applicant's arguments filed October 17, 2007 have been fully considered but they are not persuasive.

Regarding **claim 1**, applicant submits that Herrod does not disclose "when said digital camera placed in said cradle unit selects said external display mode", (Remarks, page 11 lines 11-16. However, the examiner respectfully disagrees.

Since claim 1 is rejected by combining two references Bianchi (U.S. Pub. 2003/011749) and Herrod (U.S. Pat. 6,405,049), Bianchi discloses a <u>docked digital</u> <u>still camera with a review mode</u>, (Bianchi, Fig. 1 and paragraph [0026], wherein camera 18 is in review mode when it is docked to docking station 14). Therefore, the condition of "when said digital camera placed in said cradle unit selects said external display mode" is met.

Additionally, applicant submits that Herrod does not disclose "sending operation code to the external display means to put the external display means in an external input condition" and "external display means", (Remarks, page 11 lines 18-21 and page 12 lines). However, the examiner respectfully disagrees.

Regarding the above features, Herrod discloses an external display 10 (CRT television display or LCD display), a cradle 12, and wireless and remote communication means (infrared IRDA, microwave, RF) between them (Herrod, Fig. 1, Fig. 2a, column 6 lines 1-16 and 30-33, and column 7 lines 1-5, wherein cradle 12 can wirelessly transfer control or other data to external display 10). Therefore, the external display 10 does not

need a connection cable to be attached to the cradle and the external display is in external input condition when it wirelessly and remotely receives control and display data from the cradle.

Regarding examiner's motivation, it is obvious to modify the teachings of Bianchi with the teachings of Herrod so as to remotely control the display (by infrared IRDA, microwave, RF) because such combination eliminates burden to physically touch control buttons of the display and a connecting cable and lowers power consumption. More specifically, wireless communication is more desirable for connecting a camera cradle and an external display.

### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchi et al (USPub. 2003/0117499) and further in view of Herrod et al (USPat. 6,405,049). Herein after, Bianchi et al and Herrod et al are shortened as Bianchi and Herrod, respectively.

Regarding **claim 1**, Bianchi discloses a digital camera system (Bianchi, Fig. 1) comprising a digital camera (18) and a cradle unit (14), said digital camera (18) being capable of selecting one of modes including a data transfer mode for transferring image

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data to an external apparatus, (Bianchi, paragraph [0034], wherein camera 18 can transfer information to a computer via a cable) and an external display mode for displaying the image data on external display means (40), (Bianchi, paragraph [0026], wherein camera 18 is in review mode when it is docked to cradle 14); said cradle unit (14) comprising a receiving portion (cradle body) on which said digital camera is received, a connection terminal (24) to be connected to said digital camera upon receiving said digital camera, a power-supply portion (34) for supplying an electric power to said digital camera (Bianchi, Fig. 1 and paragraph [0035], wherein camera receives its power from docking station 14), and an external-display output port (38) for outputting said image data to said external display means (Bianchi, Fig. 1 and paragraph [0033], wherein an audio/video port and a cable are disclosed).

However, Bianchi does not disclose

a data output port for transferring said image data to said external apparatus.

an operation-code generator provided in said cradle unit, said operation-code
generator generating an operation code for operating said external display means; and

a transmitter provided in said cradle unit, said transmitter sending said operation code to said external display means in a wireless manner, and said operation code being sent so as to put said external display means in an external input condition, under which the image is able to be displayed, when said digital camera placed in said cradle unit selects said external display mode.

On the other hand, in the same field of endeavor, Herrod discloses

a data output port (for use with cable) for transferring said image data to said external apparatus, (Herrod, Fig. 1 and column 5 lines 40-42, wherein cradle 12 can transfer image data to a connected stand-alone computer).

an operation-code generator (30) provided in said cradle unit (12), said operation-code generator generating an operation code (control signal) for operating said external display means (10, television display), (Herrod, Fig. 1, Fig. 2a, column 6 lines 6-16 and lines 30-32, wherein cradle 12 transfers control signal to television display 10);

a transmitter (42) provided in said cradle unit (12), said transmitter sending said operation code to said external display means (television display 10) in a wireless manner (infrared IRDA), (Herrod, column 6 lines11-15 and column 7 lines 1-4, wherein infrared communication is established between cradle 12 and television display 10), and said operation code (control signal) being sent so as to put said external display means (television display 10) in an external input condition, under which the image is able to be displayed, when said digital camera placed in said cradle unit selects said external display mode.

Therefore, it would have been obvious to an artisan to implement the data output port as described by Herrod into the digital system as described by Bianchi such that the cradle is connected to a computer because such implementation increases versatility for the cradle. Furthermore, it would have been obvious to an artisan to incorporate the operation-code generator and transmitter as described by Herrod into the digital system as described by Bianchi in order to remotely control the television

under the external input condition in an infrared manner because such incorporation not only eliminates the burden to physically touch control buttons of the TV but also results in a simple circuit for infrared transmission which lowers product costs and power consumption.

Regarding **claim 19**, Bianchi and Herrod discloses all of the limitation of the parent claim. In addition, Herrod discloses an input side (terminal interface) of the operation code generator (30) is connected to the connection terminal (Herrod, Fig. 2a, wherein terminal interface 36 and processor 30 are used for exchange information between cradle and an external device, in view of Bianchi, camera 18 is connected).

Regarding **claim 20**, Bianchi and Herrod all of the limitations of the parent claim. In addition, Bianchi discloses when said digital camera placed in said cradle unit selects said external display mode, an operation signal (command signal) for activating the operation code generator is sent through the connection terminal (24) (Bianchi, paragraph [0055], wherein camera is placed in docking station and sends command signal to display 10, in view of Herrod, by activating operation code generator).

Regarding **claim 18**, Bianchi discloses a cradle unit for a digital camera (Bianchi, Fig. 1), said digital camera (18) being capable of selecting one of modes including a data transfer mode for transferring image data to an external apparatus (Bianchi, paragraph [0034], wherein camera 18 can transfer information to a computer via a cable) and an external- display mode for displaying the image data on external display means (40), (Bianchi, paragraph [0026], wherein camera 18 is in review mode when it is docked to cradle 14), said cradle unit (14) comprising:

a receiving portion (cradle body 14) for receiving said digital camera (18);

a connection terminal (24) to be connected to said digital camera (18);

a power-supply portion (34) for supplying an electric power to said digital camera, (Bianchi, Fig. 1 and paragraph [0035], wherein camera receives its power from docking station 14);

an external-display output port (38) for outputting said image data to said external display means (TV 40), (Bianchi, Fig. 1 and paragraph [0033], wherein an audio/video port and a cable are disclosed);

However, Bianchi does not disclose

a data output port for transferring said image data to said external apparatus; an operation-code generator for generating an operation code for operating said external display means; and

a transmitter for sending said operation code to said external display means in a wireless manner, said operation code being sent so as to put said external display means in an external input condition, under which the image is able to be displayed, when said digital camera placed in said receiving portion is set to the external display mode.

On the other hand, in the same field of endeavor, Herrod discloses

a data output port (for use with cable) for transferring said image data to said external apparatus, (Herrod, Fig. 1 and column 5 lines 40-42, wherein cradle 12 can transfer image data to a connected stand-alone computer).

an operation-code generator (30) for generating an operation code (control signal) for operating said external display means (10, television display), (Herrod, Fig. 1, Fig. 2a, column 6 lines 6-16 and lines 30-32, wherein cradle 12 transfers control signal to television display 10);

a transmitter (42) for sending said operation code to said external display means (television display 10) in a wireless manner (infrared IRDA), (Herrod, column 6 lines11-15 and column 7 lines 1-4, wherein infrared communication is established between cradle 12 and television display 10), said operation code (control signal) being sent so as to put said external display means (television display 10) in an external input condition, under which the image is able to be displayed, when said digital camera placed in said cradle unit selects said external display mode.

Therefore, it would have been obvious to an artisan to implement the data output port as described by Herrod into the digital system as described by Bianchi such that the cradle is connected to a computer because such implementation increases versatility for the cradle. Furthermore, it would have been obvious to an artisan to incorporate the operation-code generator and transmitter as described by Herrod into the digital system as described by Bianchi in order to remotely control the television under the external input condition in an infrared manner because such incorporation not only eliminates the burden to physically touch control buttons of the TV but also results in a simple circuit for infrared transmission which lowers product costs and power consumption.

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Claims 2-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bianchi et al (USPub. 2003/0117499) and further in view of Herrod et al (USPat. 6,405,049) and Kuroiwa et al (USPat. 5,715,020). Herein after, Bianchi et al and Herrod et al and Kuroiwa et al are shortened as Bianchi, Herrod, and Kuroiwa respectively.

Regarding claim 2, Bianchi and Herrod teach the system of claim 1.

However, Bianchi and Herrod do not teach that said operation-code generator generates said operation code as an analog signal.

On the other hand, in the same endeavor, Kuroiwa teaches an operation-code generator (811,812,815) generates said operation code as an analog signal (Kuroiwa, Fig. 1 and Fig. 4, wherein TV remote control unit 601 generates analog signal).

Therefore it would have been obvious to an artisan to implement the code generator as described by Kuroiwa into the digital camera system as described by Bianchi and Herrod in order to remotely control a TV because such implementation eliminate the burden of physically touching control buttons on the TV.

As for **claim 3**, Bianchi, Herrod, and Kuroiwa teach the system of claim 2. Furthermore, Kuroiwa discloses said transmitter comprises:

a transparent cover (inherent part of a TV remote control system) fitted to said cradle unit; and

a light emitting element (816) disposed inside said transparent cover, said light emitting element being connected to said operation-code generator (811,812,815) to emit an infrared signal in accordance with the analog signal of said operation code,

(Kuroiwa, Fig. 4).

As for **claim 4**, Bianchi, Herrod, and Kuroiwa teach the system of claim 3. Furthermore, Kuroiwa discloses said light emitting element (816) is an infrared light emitting diode, (Kuroiwa, Fig. 4 and column 11 line 54, wherein an infrared light-emitting diode is used).

As for **claim 5**, Bianchi, Herrod, and Kuroiwa teach the system of claim 3. Furthermore, Kuroiwa discloses said external display means is one of a TV monitor, a projector and a liquid crystal display, (Kuroiwa, Fig. 4, wherein a TV receives signal form the infrared light-emitting diode).

### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan H. Le whose telephone number is (571) 270-1130. The examiner can normally be reached on M-Th 7:30-5:00 F 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David L. Ometz can be reached on (571) 272-7593. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tuan Le/

PRIMARY EXAMINER